



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,033	07/21/2003	James R. Richter	09793953-0039	5119
26263	7590	09/09/2005	EXAMINER	
SONNENSCHN NATH & ROSENTHAL LLP P.O. BOX 061080 WACKER DRIVE STATION, SEARS TOWER CHICAGO, IL 60606-1080			PRICE, CRAIG JAMES	
			ART UNIT	PAPER NUMBER
			3753	

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

e

Office Action Summary	Application No.		Applicant(s)	
	10/624,033		RICHTER, JAMES R.	
	Examiner		Art Unit	
	Craig Price		3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 24-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-26 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>07/21/2003</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species of the claimed invention:

Species A, Figures 1-4;

Species B, Figure 6;

Species C, Figure 7;

Species D, Figure 8;

Species E, Figure 9;

Species F, Figure 10;

Species G, Figure 11.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1,6,16,and 24 are generic.

2. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims

Art Unit: 3754

are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

3. During a telephone conversation with Mr. Kevin Guynn on August 25, 2005 a provisional election was made with traverse to prosecute the invention of Species A depicted in Figures 1-4. Affirmation of this election must be made by applicant in replying to this Office action. Claims 24-26 are withdrawn from further consideration by the examiner, because the claimed subject matter in claim 24, lines 3-4, "a turbulence reducing device arranged to allow fluid flow therethrough and to impart a rotational motion of said fluid", is not shown in Figures 1-4, of the elected species. As to claim 25, line 2, the claimed subject matter, "wherein an elbow is arranged upstream of said pump", is not shown in Figures 1-4 of the elected species.

Art Unit: 3754

Claim Objections

4. Claim 1 is objected to because of the following informalities: in claim 1, line 5, it appears that the claimed subject matter "fluid" second occurrence be changed to -- said fluid -- to prevent double inclusion in the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1,2,4-8,10-12,14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCall (5,363,699) in view of Richter (5,273,321) and Kozyuk (6,012,492).

Regarding Claim 1, McCall discloses a fluid flow stabilizer (10) for use in a flow of fluid in a conduit with a turbulence creating device (col. 4, ll. 42-57), comprising of a fluid conduit section (12) having a first end (20) for mounting the first end to the fluid conduit and a second end (end of flange 16) for mounting the second end to the fluid

Art Unit: 3754

conduit, the fluid conduit section having a fluid passage therethrough to allow fluid to flow from the first end to the second end as seen in Figure 2, a flow straightening device (36,38) positioned in the fluid conduit section, the flow straightening device (36,38) comprises one or more longitudinally extending vanes as shown in Figure 2, the fluid conduit section has a length (from 20 to the end of flange 16) and an internal diameter, with the length being less than five times the diameter, as shown in Figure 2, the second mounting arrangement comprises a flange with a series of spaced bolt holes extending therethrough (col4, ll. 41-48). McCall lacks, that the fluid conduit section being constructed to absorb at least one of shock, vibration and alignment, and, a fluid control device. Richter teaches the use of a fluid conduit section (11), where the fluid conduit section (11) is constructed to absorb at least one of shock, vibration and alignment (col.1, ll. 5-52 and in col. 4, ll. 3-17). Kozyuk teaches the use of a valve (150) used in a fluid conduit (116) as shown in Figure 2.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Richter's teaching onto McCall's fluid conduit section by having the fluid conduit section made of flexible member as taught by Richter in (col. 1, ll. 5-52 and in col. 4, ll. 3-17), in order to provide a flexible conduit section which provides a greater acoustical impedance.

Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the fluid conduit section of McCall and Richter to have the fluid control device as taught by Kozyuk in Figure 2, in order to provide a means of controlling the fluid.

Art Unit: 3754

With respect to claim 11, the claimed subject matter, "each vane arranged perpendicular to adjacent vanes".

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to have each vane arranged perpendicular to adjacent vanes, because applicant has not disclosed that arranging each vane perpendicular to adjacent vanes provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected applicant's invention to perform equally well with McCall's vanes (36,38), because McCall's vanes are being used to stabilize the flow (col. 6, ll. 37-51).

Therefore, it would have been an obvious matter of design choice to modify the vanes of McCall, Richter and Kozyuk to obtain the invention specified in claim 11.

7. Claims 3,9 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCall (5,363,699) in view of Richter (5,273,321) and Kozyuk (6,012,492) as applied to claims 1 and 6, and further in view of Rosecrans (4,366,746).

McCall-Richter-Kozyuk in combination have taught all of the features of the claimed invention except that, the fluid conduit section comprises of a flexible metal hose. Rosecrans teaches a flexible metal hose (50), as shown in Figure 2.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the conduit section of McCall, Richter and Kozyuk to have the fluid conduit section made of a flexible metal hose as taught by Rosecrans, in

Art Unit: 3754

order to improve the number of pressure impulse cycles without failure, as shown in Figure 3 and (col. 6, ll. 55-68).

8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCall (5,363,699) in view of Richter (5,273,321) and Kozyuk (6,012,492), as applied to claim 11, and further in view of Arnaudeau (4,365,932).

McCall-Richter-Kozyuk in combination have taught all of the claimed features except that, the vanes have a hydrodynamic shape. Arnaudeau teaches a flow straightener having thick fins in the hydrodynamic sense (col.6, ll. 44,45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the vanes of McCall, Richter and Kozyuk to have a hydrodynamic shape as taught by Arnaudeau, in order to define the flow of liquid and maximize uniform flow through the channel.

9. Claims 16,20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCall (5,363,699) in view of Kozyuk (6,012,492).

McCall discloses a pipe flow stabilizer for use in a pipeline between a pump (col. 4, ll. 52-55) comprising of a pump connector having a first end (20) with a first mounting arrangement for mounting the first end to the pump, the pump connector having a fluid passage therethrough to allow fluid to flow from the first end (20) to the second end (end of flange 16), and a flow straightening device (36,38) in the pump connector (12) as shown in Figure 2.

McCall lacks a valve in a pipeline. Kozyuk teaches the use of a valve (150) used in a fluid conduit (116) as shown in Figure 2.

Art Unit: 3754

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the fluid conduit section of McCall to have the fluid control device as taught by Kozyuk in Figure 2, in order to provide a means of controlling the fluid.

10. Claims 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCall (5,363,699) in view of Kozyuk (6,012,492), as applied to claim 16, and further in view of Richter (5,273,321).

McCall-Kozyuk in combination have taught all features of the claimed invention except that, the pump connector is constructed to absorb at least one of shock, vibration and alignment in the pipeline, and comprises an elastomeric material. Richter teaches the use of a fluid conduit section (11), where the fluid conduit section (11) is constructed to absorb at least one of shock, vibration and alignment (col.1, ll. 5-52 and in col. 4, ll. 3-17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Richter's teaching onto McCall-Kozyuk's pump connector by having the pump connector constructed to absorb at least one of shock, vibration and alignment as taught by Richter in (col. 1, ll. 5-52 and in col. 4, ll. 3-17), in order to provide a pump connector that provides a greater acoustical impedance

11. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCall (5,363,699) in view of (6,012,492), as applied to claim 16, and further in view of Rosecrans (4,366,746).

Art Unit: 3754

McCall and Kozyuk have taught all of the claimed features except that, the pump connector comprises a flexible metal hose. Rosecrans teaches a flexible metal hose (50), as shown in Figure 2.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the pump connector of McCall and Kozyuk to have the pump connector made of a flexible metal hose as taught by Rosecrans, in order to improve the number of pressure impulse cycles without failure, as shown in Figure 3 and (col. 6, ll. 55-68).

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Murphy (3,945,402), F.McCall et al. (3,049,009), Schafbuch et al. (5,482,249), Welker (6,289,934), Hartman (5,588,635), Belligna (4,142,413), Roberts et al. (3,645,298), Broad (3,841,568), Holsomback (4,154,265), List et al. (6,014,987), Inoshiri et al. (5,937,908), Boyd et al. (2,478,998), Hill (6,186,179), J.G.Holdenried (2,688,985), Combes et al. (4,408,892), and Kozyuk (6,035,897) show various types of flow conditioning devices. E.W. Parlasca et al. (3,029,094) shows a flexible pipe coupling.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Price whose telephone number is (571) 272-2712. The examiner can normally be reached on 8AM - 5PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frederick Nicolas can be reached on (571) 272-4931. The fax phone

Art Unit: 3754

number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

August 19, 2005

CP

Craig Price
Examiner
Art unit 3754



Frederick Nicolas
Primary Examiner



9/5/05